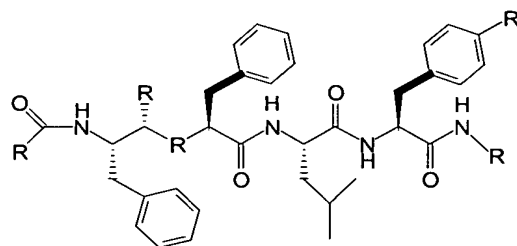


## THE INVENTION CLAIMED IS

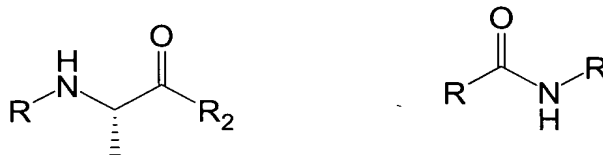
1. A method of treating tumors or proliferative disorders in an animal or human in need of such treatment, comprising administering to the animal or human therapeutically effective amounts in unit dosage form of a composition comprising a carrier and at least one secretase inhibitor.
2. The method of claim 1, wherein the secretase inhibitor specifically inhibits amyloid precursor protein secretases.
3. The method of claim 2, wherein the secretase inhibitor is a  $\gamma$ -secretase inhibitor.
4. The method of claim 3, wherein the  $\gamma$ -secretase inhibitor is an aspartyl protease transition-state  $\gamma$ -secretase inhibitor having the following backbone chemical structure:



wherein R refers to analogue substitutions.

5. The method of claim 4, wherein the aspartyl protease transition-state  $\gamma$ -secretase inhibitor is L-685,458.

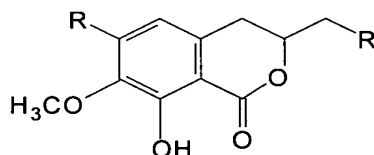
6. The method of claim 3, wherein the  $\gamma$ -secretase inhibitor is a dipeptide protease  $\gamma$ -secretase inhibitor having the following two backbone structures:



wherein R refers to analogue substitutions.

7. The method of claim 6, wherein the dipeptide protease  $\gamma$ -secretase inhibitor is selected from the group consisting of DAPT and DAPM.

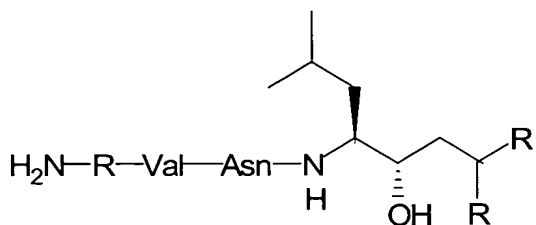
8. The method of claim 3, wherein the  $\gamma$ -secretase inhibitor is an isocoumarin-based serine protease  $\gamma$ -secretase inhibitor having the following backbone structure:



wherein R refers to analogue substitutions.

9. The method of claim 8, wherein the isocoumarin-based serine protease  $\gamma$ -secretase inhibitor is JLK-6.

10. The method of claim 2, wherein the secretase inhibitor is a  $\beta$ -secretase inhibitor having the following chemical structure:



wherein R refers to analogue substitutions.

11. The method of claim 10, wherein the  $\beta$ -secretase inhibitor is a peptidomimetic tight binding transition-state analogue  $\beta$ -secretase inhibitor.

12. The method of claim 11, wherein the peptidomimetic tight binding transition-state analogue  $\beta$ -secretase inhibitor is OM99-2.

13. The method of claim 10, wherein the  $\beta$ -secretase inhibitor is a substrate analogue peptide  $\beta$ -secretase inhibitor.

14. The method of claim 13, wherein the substrate analogue peptide  $\beta$ -secretase inhibitor is selected from the group consisting of Z-VLL-CHO, GL189 and P10-P4'statV.

15. The method of claim 1, wherein the tumors are selected from the group consisting of glioblastomas, lung adenocarcinomas and malignant tumors of the breast, colon, kidney, bladder, head or neck.

16. The method of claim 1, wherein the proliferative disorders are hematopoietic disorders.

17. The method of claim 16, wherein the hematopoietic disorders are selected from the group consisting of leukemias, lymphomas and polycythemias.

18. The method of claim 1, wherein the proliferative disorders are ocular disorders.

19. The method of claim 18, wherein the ocular disorders are selected from the group consisting of diabetic retinopathy, macular degeneration, glaucoma and retinitis pigmentosa.

20. The method of claim 1, wherein the carrier is a pharmaceutically acceptable carrier or diluent.

21. The method of claim 1, wherein the route of administration of the composition to the animal or human is via parenteral, oral or intraperitoneal administration.

22. The method of claim 21, wherein the parenteral route of administration is selected from the group consisting of intravenous; intramuscular; interstitial; intra-arterial; subcutaneous; intraocular; intracranial; intraventricular; intrasynovial; transepithelial, including transdermal, pulmonary via inhalation, ophthalmic, sublingual and buccal; topical, including ophthalmic, dermal, ocular, rectal, and nasal inhalation via insufflation or nebulization.

23. The method of claim 1, wherein the unit dosage is administered orally in the form of hard or soft shell gelatin capsules, tablets, troches, sachets, lozenges, elixirs, suspensions, syrups, wafers, powders, granules, solutions or emulsions.

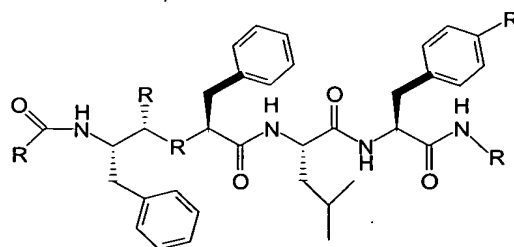
24. The method of claim 22, wherein the nasal administration of the secretase inhibitor is selected from the group consisting of aerosols, atomizers and nebulizers.

25. A method of inhibiting angiogenesis associated with tumors, proliferative disorders or inflammatory disorders in an animal or human in need of such inhibition, comprising administering to the animal or human therapeutically effective amounts in unit dosage form of a composition comprising a carrier and at least one secretase inhibitor.

26. The method of claim 25, wherein the secretase inhibitor specifically inhibits amyloid precursor protein secretases.

27. The method of claim 26, wherein the secretase inhibitor is a  $\gamma$ -secretase inhibitor.

28. The method of claim 27, wherein the  $\gamma$ -secretase inhibitor is an aspartyl protease transition-state  $\gamma$ -secretase inhibitor having the following backbone structure:



wherein R refers to analogue substitutions.

29. The method of claim 28, wherein the aspartyl protease transition-state  $\gamma$ -secretase inhibitor is L-685,458.

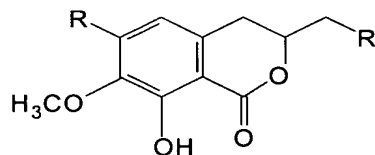
30. The method of claim 27, wherein the  $\gamma$ -secretase inhibitor is a dipeptide protease  $\gamma$ -secretase inhibitor having the following two backbone structures:



wherein R refers to analogue substitutions.

31. The method of claim 30, wherein the dipeptide protease  $\gamma$ -secretase inhibitor is selected from the group consisting of DAPT and DAPM.

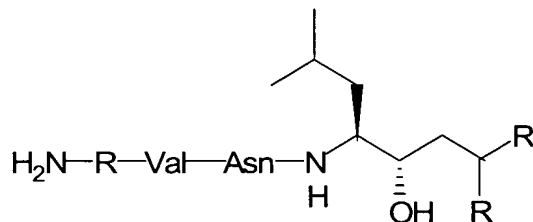
32. The method of claim 27, wherein the  $\gamma$ -secretase inhibitor is an isocoumarin-based serine protease  $\gamma$ -secretase inhibitor having the following backbone chemical structure:



wherein R refers to analogue substitutions.

33. The method of claim 32, wherein the isocoumarin-based serine protease  $\gamma$ -secretase inhibitor is JLK-6.

34. The method of claim 26, wherein the secretase inhibitor is a  $\beta$ -secretase inhibitor having the following chemical structure:



wherein  $\text{R}$  refers to analogue substitutions.

35. The method of claim 34, wherein the  $\beta$ -secretase inhibitor is a peptidomimetic tight binding transition-state analogue  $\beta$ -secretase inhibitor.

36. The method of claim 35, wherein the peptidomimetic tight binding transition-state analogue  $\beta$ -secretase inhibitor is OM99-2.

37. The method of claim 34, wherein the  $\beta$ -secretase inhibitor is a substrate analogue peptide  $\beta$ -secretase inhibitor.

38. The method of claim 37, wherein the substrate analogue peptide  $\beta$ -secretase inhibitor is selected from the group consisting of Z-VLL-CHO, GL189 and P10-P4'statV.

39. The method of claim 25, wherein the tumors are selected from the group consisting of glioblastomas, lung adenocarcinomas and malignant tumors of the breast, colon, kidney, bladder, head or neck.

40. The method of claim 25, wherein the proliferative disorders are hematopoietic disorders.

41. The method of claim 40, wherein the hematopoietic disorders are selected from the group consisting of leukemias, lymphomas and polycythemias.

42. The method of claim 25, wherein the proliferative disorders are ocular disorders.

43. The method of claim 42, wherein the ocular disorders are selected from the group consisting of diabetic retinopathy, macular degeneration, glaucoma and retinitis pigmentosa.

44. The method of claim 26, wherein the inflammatory disorders are selected from the group consisting of rheumatoid arthritis, osteoarthritis, pulmonary fibrosis, sarcoid granulomas, psoriasis and asthma.

45. The method of claim 25, wherein the carrier is a pharmaceutically acceptable carrier or diluent.

46. The method of claim 25, wherein the route of administration of the composition to the animal or human is via parenteral, oral or intraperitoneal administration.

47. The method of claim 46, wherein the parenteral route of administration is selected from the group consisting of intravenous; intramuscular; interstitial; intra-arterial; subcutaneous; intraocular; intracranial; intraventricular; intrasynovial; transepithelial, including transdermal, pulmonary via inhalation, ophthalmic, sublingual and buccal; topical,



including ophthalmic, dermal, ocular, rectal, and nasal inhalation via insufflation or nebulization.

48. The method of claim 25, wherein the unit dosage is administered orally in the form of hard or soft shell gelatin capsules, tablets, troches, sachets, lozenges, elixirs, suspensions, syrups, wafers, powders, granules, solutions or emulsions.

49. The method of claim 46, wherein the nasal administration of the secretase inhibitor is selected from the group consisting of aerosols, atomizers and nebulizers.